



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/532,952	03/22/2000	Sang-Young Noh	P-078	8687

7590 10/23/2003

Fleshner & Kim, LLP
14500 Avion Parkway
Suite 125
Chantilly, VA 20151

EXAMINER

EMDADI, MEHDI

ART UNIT	PAPER NUMBER
----------	--------------

2663

DATE MAILED: 10/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/532,952

Applicant(s)

NOH, SANG-YOUNG

Examiner

Mehdi Emdadi

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/22/2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/22/2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the W-CDMA WLL operational setting must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
2. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show periodic transmission of control instructions, time slots, data and instructions, the operation of slave unit as controlled by the microprocessor, decoding logic, framing logic, and other necessary details as described in the specification. Further, the Background of the Related Art in lines 18 and 19 states: "In addition, there are further provided a modem module, a subscriber interface module, and RF module, etc., which are not shown in Figure 1." It is not clear to the examiner why this sentence is provided and what must be construed by it. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing.

MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Content of Specification

4. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms. "The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: "register control" (Page 15, Abstract), "separation type" (Page 1, Line 8), "basic type" (Page 1, Line 12), "125_sec." (Page 7, Line 16), "the corresponding opponents" (Page 7, Line 14), "mirror register" (Page 7, Line 17), "(E1 implementation reference on page 7)", "master unit" (Page 7, Line 15), and "slave unit" (Page 7, Line 4).

Claim Rejections - 35 USC 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claims 1-21, phrases like: "basic type" and "separation type" render the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. The changes made to 35 U.S.C. 102(a) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(a) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(a)).
9. Claims 1-21 are rejected under 35 U.S.C. 102(a) as being anticipated by PM6341 E1XC (E1 Framer/Transceiver Data Sheet Issue 8: June 1998, by PMC-Sierra, Inc.)
10. Regarding claims 1, 6, and 20 PM6341 teaches: "Integrates a full-featured E1 transceiver in a single device." (Page 1, FEATURES), "Provides an 8-bit microprocessor bus interface for configuration, control, and status monitoring." (Page 1, FEATURES), "The receiver section..." (Page 1, FEATURES), "The transmitter section" (Page 2), "Microprocessor Interface with Address lines, data lines, Read, Write, and CS lines" (Block Diagram, Page 10), "Transmitter Frame Generation and Receiver Framer" (Block

Diagram, Page 10), "Register contents for Control and Status" (Page 110), "transmission formats, including the 2.048 Mbits/s E1 format" (Page 7 second Paragraph), "This signal is pulsed low to enable a E1XC register read access." (Page 36, Function), "This signal is pulsed low to enable a E1XC signal write access." (Page 36, Function). The cited reference discusses the device implementing a number of standard multiplexing techniques with both the transmission and the reception segments as depicted in the above claims. The E1 multiplexing technique and products from multiple sources in the industry, as described on page 7 of the Application, meets and exceeds the functionality described in this Application and it is a general purpose device for use in wire-line and wireless environments such as W-CDMA WLL. A multitude of data and control registers, internal to the E1 device, "mirror" the register contents at both ends of the transmission line. These registers can operate in "master" and/or "slave" modes.

11. Regarding claims 2-5, PM6341 teaches: The provision of functions for a communications multiplexing system with periodic transmission and reception, registers with the same contents by virtue of multiplexing and demultiplexing, master controller by virtue of having a microcomputer interface, slave controller by virtue of having either a microcomputer interface or none, wherein the transmission path connects one device to the other and is a link obtained based on the amount of data that can be processed by the slave unit.

12. Regarding claims 7-17, PM6341 teaches: The provision of functions (refer to Page 10, Block Diagram and all the references shown above) to interface with a microprocessor for controlling any variation of wireline and wireless terminals, the inclusion of decoding logic for interpreting microprocessor instructions, the inclusion of framing logic for both transmission and reception ends of the link, and a plurality of registers for both master and slave uses. Time slot functional allocations (Pages 52 and 160), clock NX8 KHz source applied on TCLK1 (Page 223, Section 14.10.4), Frame Synchronization algorithm flowchart (Page 46).
13. Regarding claims 18, 19, and 21, PM6341 teaches: Two-way transmit and receive operation between two devices ("E1 transceiver", Page 1, FEATURES), the amount of data processed by a slave configuration of the same device can form the basis for the transmission link characteristics including its available speeds (Page 4, APPLICATIONS, and all the above mentioned references.)

Conclusion

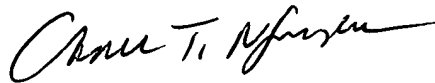
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehdi Emdadi whose telephone number is (703) 305-8709. The examiner can normally be reached between the hours of 8am and 5pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen, can be reached at (703) 305-5340. The fax phone numbers for the organization where this

Art Unit: 2663

application or proceeding is assigned is (703) 872-9314 for regular communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Mehdi Emdadi

10-07-2003



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600